KICKER®

U.S.A.

PS/PSR POWERED SUBSTATIONS

ENCLOSURE SYSTEMS

Kicker Powered Substations™ are powered versions of KICKER's award-winning Substation enclosed subwoofers. They are the ideal compliment to any full range system that needs increased lower frequency output. They can be added to anything from a stock factory system up to a custom-installed midbass/midrange/tweeter setup. The enclosures are designed to fit in the rear of Sport Utility Vehicles and Hatchback cars or in the trunk of a sedan. All Powered Substations are optimized to provide the most dynamic bass for a given amount of space.

GENERAL FEATURES

- Built-in amplifier - No need for an external amplifier, just hook up to the vehicle's battery and signal source.
- Active electronic crossover - Adjustable 24dB/octave crossover from 70 to 140 Hz allows for fine tuning to match your system.
- Universal inputs - Either line level or speaker level input accepted, even floating ground.
- Signal sense turn-on option - Automatically turns on Substation if power antenna lead is not available.
- Gain control - You control the output level to balance your Substation with the rest of your system.
- Remote speaker output - Models PS60, PS80, and PSR80 have an output for powering a remote regular Substation with the built-in amplifier.

SPECIFICATIONS

Model	Woofer (in.)	Enclosure Dimensions (WxHxL/in.)	RMS Power (watts) at 12.5V	Frequency Response (Hz)	Remote Speaker Output Impedance (ohms)	Power with Remote Speaker (watts)
PSR120	12	14-1/4x14-1/4x31	140	36-150	N/A	N/A
PSR100	10	12-1/4x12-1/4x251/8	140	39-150	N/A	N/A
PSR80	8	10-1/8x10-1/8x23	80	40-150	4	140
PS80	8	8-5/8x8-5/8x18	80	29-150	4	140
PS60	6.5	7x7x18	50	32-150	8	80

Specifications common to all models:

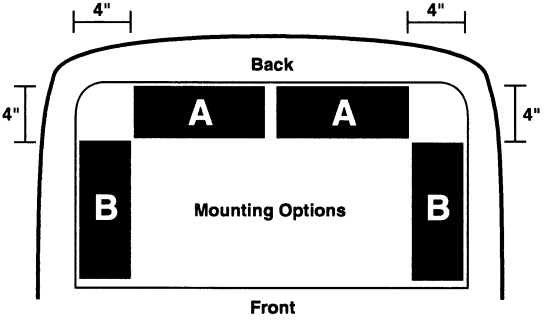
Input sensitivity	150mV to 10V
THD	0.05%
Signal to noise Ratio	-95dB
Crossover	70-140Hz at 24dB/octave

AMERICA'S MUSIC MACHINESSM

GENERAL INSTALLATION INFORMATION

The position of your Kicker Powered Substation will affect the quality and amount of the bass it reproduces. The best results will come from boundary loading the output of the Substation into a corner of the vehicle. The PS60 and PS80 have a woofer on one end and a port on the other end. By placing either the port or the woofer in the corner will change which portion of the bass gets reinforced by the boundary loading effect. Pointing the port into a corner will boost the lower frequencies while corner loading the woofer will increase the output of the upper bass.

After choosing the best location for your Powered Substation, it is necessary to permanently mount the enclosure to the vehicle. Locate the provided brackets where the mounting screws won't interfere with or damage any wiring, fuel lines, etc. in the vehicle. Use the smaller screws to attach the bracket to the enclosure and mount the assembly to the floor with the larger screws.



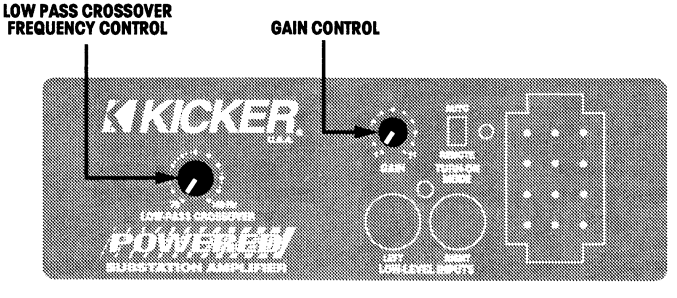
If the enclosed brackets are not applicable to your installation, some other means must be utilized to secure the cabinet to the vehicle.

WARNING!!

To avoid potential injury from forward movement of speakers during abrupt stops or accident, they must be properly installed and securely fastened to the vehicle!

TUNING AND CONTROLS

The gain control is used to match the input of your Kicker Powered Substation to the rest of the system. After mounting and wiring the Substation turn the gain control all the way down. Turn the system on and check the level of the bass in relation to the mids and highs. If your personal taste requires more output from the Substation merely turn the gain control up until the sound is the way you like it.

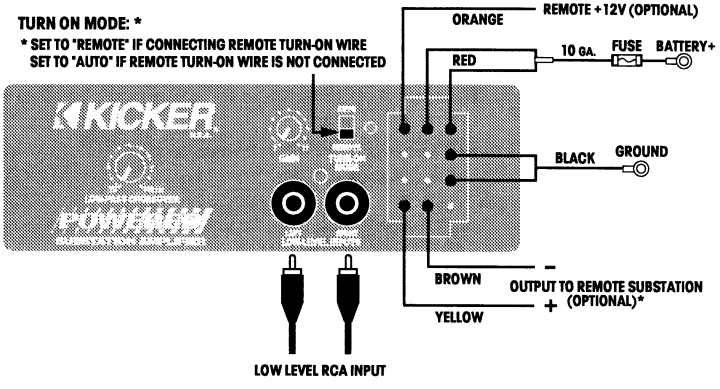


The Low Pass Crossover control is designed to help match the frequencies reproduced by the Substation to your existing speakers. If you are limited to smaller factory speakers that don't reproduce the midbass very well it will work best to start with a higher crossover point like 140Hz. This will allow the Substation to fill in some of the information that the small speakers miss. If your existing speakers play the midbass information well and you want to fill in the sub-bass region only, start with a low setting on the crossover like 70Hz. Fine tuning can be done by ear to match the bass to the rest of the system.

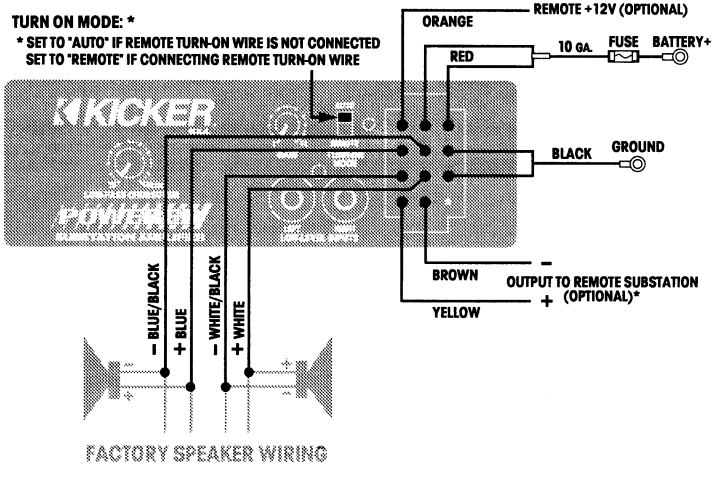
WIRING

Your Powered Substation accepts either low (line) levels input from the RCA outputs on your head unit or high (speaker) level input from your system's speaker wiring. The diagrams below illustrate both wiring schemes. DO NOT USE THE LOW LEVEL AND HIGH LEVEL INPUTS AT THE SAME TIME AS THIS COULD DAMAGE YOUR UNIT.

LOW-LEVEL INPUT WIRING



HIGH-LEVEL INPUT WIRING



*Adding an additional Substation to your Powered Substation

Your PSR80, PS80, or PS60 can drive a matching unpowered Substation (see diagrams above for wiring instructions).

Components MUST be matched as follows:

Powered Model	Remote Model	Remote Model Impedance
PSR80	KSR80	4Ω
PS80	KS80	4Ω
PS60	KS60	8Ω

The PSR120 and PSR100 are not designed to drive remote Substations.

If you have more questions about the installation of your new KICKER component, see the Authorized KICKER Dealer where you purchased your component. You may also call our Technical Services Line at 405 624-8583 for technical assistance.

SPEAKER SYSTEMS LIMITED WARRANTY

Stillwater Designs warrants this product to be free from defects in material and workmanship under normal use for a period of **one (1) year from date of original purchase**, unless this product is labeled B stock ("WB"), in which case it is warranted for ninety (90) days from date of purchase. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, Stillwater Designs will replace or repair (at its discretion) the defective merchandise at no charge.

This warranty is valid only for the **original purchaser** and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you.

This warranty gives you specific legal rights; however you may have other rights that vary from state to state.

WHAT TO DO IF YOU NEED WARRANTY OR SERVICE

Defective merchandise must be returned to your local Authorized Stillwater Designs (Kicker/Impulse) Dealer for warranty. Assistance in locating an Authorized Dealer can be obtained by writing or calling Stillwater Designs direct. You can confirm that a dealer is authorized by asking to see a current authorized dealer window decal.

If it becomes necessary for you to send defective merchandise, package all defective items in the original container or in a package that will prevent shipping damage, and return to

Stillwater Designs, 5021 North Perkins Road, Stillwater, OK 74075

Return only defective components. Return of entire cabinets, system packs, pairs, etc. increases your return freight charges. Non-defective items received will be returned freight collect.

Include a dated proof-of-purchase from an Authorized Dealer. Warranty expiration on items returned without proof-of-purchase will be determined from the manufacturing date code. Coverage may be invalidated if this date is greater than one (1) year previous to the date item is sent in. Freight must be prepaid; items received freight collect will be refused.

Failure to follow these steps may void your warranty. Any questions can be directed to the Warranty Department at (405)624-8510.

WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed. It does not cover:

- Products purchased from an unauthorized dealer.
- Install slips (screwdriver holes) or damage due to improper installation
- Damage caused by exposure to water, excessive heat, chemical cleaners, and/or UV radiation.
- Damage through negligence, misuse, accident or abuse. Repeated returns for the same damage may be considered abuse.
- Freight damage.
- The cost of shipping product to Stillwater Designs Service.
- Items previously repaired or modified by any unauthorized repair facility.
- Items returned from unauthorized individuals or dealers.
- Return shipping on non-defective items.
- Speakers damaged or voice coils charred due to amplifier clipping or distortion.
- Speakers with silicon caulk used for gasket material.
- Products with tampered or missing barcode labels.

HOW LONG WILL IT TAKE?

Stillwater Designs maintains a goal of 24-hour service for all returns. Delays may be incurred if lack of replacement inventory or parts is encountered.

INTERNATIONAL WARRANTY

Contact your International Stillwater Designs dealer or distributor concerning specific procedures for your country's warranty policies.

P.O. Box 459 • Stillwater, Oklahoma 74076 • U.S.A. • 405 624-8510

STILLWATER Designs®

WARNING: KICKER components are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing. **Please use common sense when controlling volume!**

FEBRUARY 1996